

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER <b>NU-631XX</b> U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>10/586,713</b>
INTERNATIONAL APPLICATION NO. <b>PCT/US05/02226</b>	INTERNATIONAL FILING DATE <b>20 January 2005</b>	PRIORITY DATE CLAIMED <b>20 January 2004</b>
TITLE OF INVENTION <b>ENHANCED DETECTION OF ACOUSTO-PHOTONIC EMISSIONS IN OPTICALLY TURBID MEDIA USING A PHOTO-REFRACTIVE CRYSTAL-BASED DETECTIONS SYSTEM</b>		
APPLICANT(S) FOR DO/EO/US <b>Charles A. Dimarzio, Ronald A. Roy, Todd W. Murray, Florian J. Blonigen, Luis A. Nieva, Lei Sui, Gopi Maguluri</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> had been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached herewith (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> <p>Items 11 to 20 below concern document(s) or information included:</p> <ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input type="checkbox"/> Other items or information:</li> </ol>		
		EXPRESS MAIL NO. <b>EV 560131483 US</b>

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO		ATTORNEY'S DOCKET NUMBER	
10/586,713		PCT/US05/02226			
The following fees have been submitted:				CALCULATIONS	PTO USE ONLY
21. <input type="checkbox"/> Basic national fee.....				\$310.00	\$
22. <input type="checkbox"/> Examination fee					
If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) .....				\$105.00	\$
All other situations .....				\$210.00	
23. <input type="checkbox"/> Search fee					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....				\$100.00	
International Search Report prepared and provided to the Office.....				\$410.00	\$
All other situations.....				\$510.00	
TOTAL OF 21, 22 and 23 =					\$
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250.00 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/ 50 =		X \$260.00	\$	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).				\$130.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	18 - 20 =	0	X \$ 50.00	\$0	
Independent claims	2 - 3 =	0	X \$210.00	\$0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$370.00	\$0	
TOTAL OF ABOVE CALCULATIONS =				\$130.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				\$65.00	
SUBTOTAL =				\$65.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				+	\$N/A
TOTAL NATIONAL FEE =				\$65.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+	\$N/A
TOTAL FEES ENCLOSED =				\$65.00	
11/23/07 007 HKAYPAGH 00000169 10586713				Amount to be Refunded:	\$0
01 FC 2617 65.00 DP				Amount to be Charged:	\$65.00
a. <input checked="" type="checkbox"/> A check in the amount of \$65.00 to cover the above fees, except assignment recordation, is enclosed. A check in the amount of \$_____ is enclosed for the assignment recordation fee.					
b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>23-0804</u> . A duplicate copy of this sheet is enclosed.					
d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
<b>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</b>					
SEND ALL CORRESPONDENCE TO:					
<input checked="" type="checkbox"/> Customer Number 00207			which is associated with the Law Firm of:		
			WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP		
			Ten Post Office Square		
			Boston, Massachusetts 02109		
			United States		
			Telephone: (617) 542-2290 Fax: (617) 451-0313		
Attorney Signature: <u>Richard E. Gamache</u> Date: <u>November 20, 2007</u>					
Attorney Name: <u>Richard E. Gamache</u> Registration No: <u>39,196</u>					
Doc.#359701					



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/586,713	Charles A. Dimarzio	NU-631XX

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WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP  
TEN POST OFFICE SQUARE  
BOSTON, MA 02109

INTERNATIONAL APPLICATION NO.	
PCT/US05/02226	
I.A. FILING DATE	PRIORITY DATE
01/20/2005	01/20/2004

BY: RECEIVED 9/14

NOV 15 2007

WEINGARTEN, SCHURGIN,  
GAGNEBIN & LEOVICI LLP

CONFIRMATION NO. 8694  
371 FORMALITIES LETTER



\*OC000000026692299\*

Date Mailed: 11/09/2007

**NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371  
IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)**

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 07/20/2006
- Copy of the International Search Report filed on 07/20/2006
- Copy of IPE Report filed on 07/20/2006
- Information Disclosure Statements filed on 10/24/2006
- Small Entity Statement filed on 07/20/2006
- U.S. Basic National Fees filed on 07/20/2006
- Priority Documents filed on 07/20/2006
- Power of Attorney filed on 05/31/2005
- Specification filed on 07/20/2006
- Claims filed on 07/20/2006
- Abstracts filed on 07/20/2006
- Drawings filed on 07/20/2006

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

**SUMMARY OF FEES DUE:**

Total additional fees required for this application is \$65 for a Small Entity:

- \$65 Surcharge.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

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The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebc>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

PATRICIA A BOOKER

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